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|                                                                 |  |                                         |  |
|-----------------------------------------------------------------|--|-----------------------------------------|--|
| <b>UTILITY<br/>PATENT APPLICATION<br/>TRANSMITTAL</b>           |  | Attorney Docket No. <b>503.34065CV4</b> |  |
|                                                                 |  | First Inventor <b>K. YAMADA, t al.</b>  |  |
|                                                                 |  | Title <b>IMPROVED CIRCUIT BOARD</b>     |  |
| (Only for new nonprovisional applications under 37 CFR 1.53(b)) |  | Express Mail Label No.                  |  |

|                                                                                                     |                                                                                                                             |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>APPLICATION ELEMENTS</b><br>SEE MPEP chapter 600 concerning utility patent application contents. | <b>ADDRESS TO:</b><br>Mail Stop Patent Application<br>Commissioner for Patents<br>P.O. Box 1450<br>Alexandria VA 22313-1450 |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| 1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17)<br><small>(Submit an original and a duplicate for fee processing)</small><br><br>2. <input type="checkbox"/> Applicant claims small entity status.<br>See 37 CFR 1.27.<br><br>3. <input checked="" type="checkbox"/> Specification <span style="float: right;">[Total Pages: <b>64</b>]</span><br><small>(preferred arrangement set forth below)</small><br>-Descriptive title of the invention<br>-Cross Reference to Related Applications<br>-Statement Regarding Fed sponsored R & D<br>-Reference to sequence listing, a table,<br>or a computer program listing appendix<br>-Background of the Invention<br>-Brief Summary of the Invention<br>-Brief Description of the Drawings (if filed)<br>-Detailed Description<br>-Claim(s)<br>-Abstract of the Disclosure<br><br>4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) <span style="float: right;">[Total Pages: <b>25</b>]</span><br><br>5. Oath or Declaration <span style="float: right;">[Total Pages: <b>3</b>]</span><br>a. <input type="checkbox"/> Newly executed (original or copy)<br>b. <input checked="" type="checkbox"/> Copy from a prior application (37 CFR 1.63 (d))<br><small>(for continuation/divisional with Box 18 completed)</small><br>i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b><br>Signed statement attached deleting inventor(s)<br>Named in the prior application, see 37 CFR<br>1.63(d)(2) and 1.33(b)<br><br>6. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76 | 7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or<br>Computer Program (Appendix)<br>8. Nucleotide and/or Amino Acid Sequence Submission<br><small>if applicable, all necessary</small><br>a. <input type="checkbox"/> Computer Readable Form (CRF)<br>b. Specification Sequence Listing on:<br>i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or<br>ii. <input type="checkbox"/> paper<br>c. <input type="checkbox"/> Statements verifying identity of above copies |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>ACCOMPANYING APPLICATION PARTS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| 9. <input type="checkbox"/> Assignment Papers (cover sheet & documents(s))<br>10. <input type="checkbox"/> 37 CFR 3.73(b) Statement <input type="checkbox"/> Power of Attorney<br><small>(when there is an assignee)</small><br>11. <input type="checkbox"/> English Translation Document (if applicable)<br>12. <input checked="" type="checkbox"/> Information Disclosure <input type="checkbox"/> Copies of IDS Citations<br>Statement (IDS)/PTO-1449<br>13. <input checked="" type="checkbox"/> Preliminary Amendment<br>14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503)<br><small>(Should be specifically itemized)</small><br>15. <input type="checkbox"/> Certified Copy of Priority Document(s)<br><small>(if foreign priority is claimed)</small><br>16. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122<br>(b)(2)(B)(i). Applicant must attach form PTO/SB/35<br>or its equivalent.<br>17. <input checked="" type="checkbox"/> Other: <b>Request for Interview Prior to First Office<br/>         Action</b> |  |


18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☒ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: **10/101,463**

Prior application information: Examiner: **L. C. Cruz** Art Unit: **2827**

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

|                                                                                               |  |                                   |  |                                                          |  |
|-----------------------------------------------------------------------------------------------|--|-----------------------------------|--|----------------------------------------------------------|--|
| <b>19. CORRESPONDENCE ADDRESS</b>                                                             |  |                                   |  |                                                          |  |
| <input checked="" type="checkbox"/> Customer Number                                           |  | <b>020457</b>                     |  | OR <input type="checkbox"/> Correspondence address below |  |
| Name <b>ANTONELLI, TERRY, STOUT &amp; KRAUS, LLP</b>                                          |  |                                   |  |                                                          |  |
| Address                                                                                       |  |                                   |  |                                                          |  |
| City                                                                                          |  | State                             |  | Zip Code                                                 |  |
| Country                                                                                       |  | Telephone                         |  | Fax                                                      |  |
|                                                                                               |  | <b>(703) 312-6600</b>             |  | <b>(703) 312-6666</b>                                    |  |
| Name <b>Gregory E. Montane</b>                                                                |  | Registration No. (Attorney/Agent) |  | <b>28,141</b>                                            |  |
| Signature  |  | Date                              |  | <b>September 22, 2003</b>                                |  |

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

09/22/03

PTO/SB/17 (01-03)

Approved for use through 04/30/2003. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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# FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)**750**

| Complete if Known    |                       |
|----------------------|-----------------------|
| Application Number   | Not yet assigned      |
| Filing Date          | On even date herewith |
| First Named Inventor | K. YAMADA, et al.     |
| Examiner Name        | Not yet assigned      |
| Art Unit             | Not yet assigned      |
| Attorney Docket No.  | 503.34065CV4          |

## METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit Card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number **01-2135**

Deposit Account Name **Antonelli, Terry, Stout & Kraus, LLP**

The Commissioner authorized to: (check all that apply)

☐ Charge fees indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) during the pendency of this application

☐ Charge fees indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

| Large Entity Fee Code | Large Entity Fee (\$) | Small Entity Fee Code | Small Entity Fee (\$) | Fee Description        | Fee Paid |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|----------|
| 1001                  | 750                   | 2001                  | 375                   | Utility filing fee     | 750      |
| 1002                  | 330                   | 2002                  | 165                   | Design filing fee      |          |
| 1003                  | 520                   | 2003                  | 260                   | Plant filing fee       |          |
| 1004                  | 750                   | 2004                  | 375                   | Reissue filing fee     |          |
| 1005                  | 160                   | 2005                  | 80                    | Provisional filing fee |          |
| SUBTOTAL (1)          |                       |                       |                       |                        | 750      |

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

|                    | Extra Claims | Fee from below | Fee Paid |
|--------------------|--------------|----------------|----------|
| Total Claims 6     | -20** = 0    | x              | = 0.00   |
| Indep. Claims 3    | -3** = 0     | x              | = 0.00   |
| Multiple Dependent |              |                | =        |

| Large Entity Fee Code | Large Entity Fee (\$) | Small Entity Fee Code | Small Entity Fee (\$) | Fee Description                                            |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------------------------------------|
| 1202                  | 18                    | 2202                  | 9                     | Claims in excess of 20                                     |
| 1201                  | 84                    | 2201                  | 42                    | Independent claims in excess of 3                          |
| 1203                  | 280                   | 2203                  | 140                   | Multiple dependent claim, if not paid                      |
| 1204                  | 84                    | 2204                  | 42                    | ** Reissue independent claims over original patent         |
| 1205                  | 18                    | 2205                  | 9                     | ** Reissue claims in excess of 20 and over original patent |
| SUBTOTAL (2) \$ 0.00  |                       |                       |                       |                                                            |

\*\*or number previously paid, if greater; For Reissues, see above.

### 3. ADDITIONAL FEES

| Large Entity Fee Code | Large Entity Fee (\$) | Small Entity Fee Code | Small Entity Fee (\$) | Fee Description                                                            | Fee Paid |
|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------------------------------------------------|----------|
| 1051                  | 130                   | 2051                  | 65                    | Surcharge - late filing fee or oath                                        |          |
| 1052                  | 50                    | 2052                  | 25                    | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053                  | 130                   | 1053                  | 130                   | Non-English specification                                                  |          |
| 1812                  | 2,520                 | 1812                  | 2,520                 | For filing a request for ex parte reexamination                            |          |
| 1804                  | 920*                  | 1804                  | 920*                  | Requesting publication of SIR prior to Examination action                  |          |
| 1805                  | 1,840*                | 1805                  | 1,840*                | Requesting publication of SIR after Examiner action                        |          |
| 1251                  | 110                   | 2251                  | 55                    | Extension for reply within first month                                     |          |
| 1252                  | 410                   | 2252                  | 205                   | Extension for reply within second month                                    |          |
| 1253                  | 930                   | 2253                  | 465                   | Extension for reply within third month                                     |          |
| 1254                  | 1,450                 | 2254                  | 725                   | Extension for reply within fourth month                                    |          |
| 1255                  | 1,970                 | 2255                  | 985                   | Extension for reply within fifth month                                     |          |
| 1401                  | 320                   | 2401                  | 160                   | Notice of Appeal                                                           |          |
| 1402                  | 320                   | 2402                  | 160                   | Filing a brief in support of an appeal                                     |          |
| 1403                  | 280                   | 2403                  | 140                   | Request for oral hearing                                                   |          |
| 1451                  | 1,510                 | 1451                  | 1,510                 | Petition to institute a public use proceeding                              |          |
| 1452                  | 110                   | 2452                  | 55                    | Petition to revive - unavoidable                                           |          |
| 1453                  | 1,300                 | 2453                  | 650                   | Petition to revive - unintentional                                         |          |
| 1501                  | 1,300                 | 2501                  | 650                   | Utility issue fee (or reissue)                                             |          |
| 1502                  | 470                   | 2502                  | 235                   | Design issue fee                                                           |          |
| 1503                  | 630                   | 2503                  | 315                   | Plant issue fee                                                            |          |
| 1406                  | 130                   | 1460                  | 130                   | Petitions to the Commissioner                                              |          |
| 1807                  | 50                    | 1807                  | 50                    | Processing fee under 37 CFR 1.17(q)                                        |          |
| 1806                  | 180                   | 1806                  | 180                   | Submission of Information Disclosure Stmt                                  |          |
| 8021                  | 40                    | 8021                  | 40                    | Recording each patent assignment per property (times number of properties) |          |
| 1809                  | 750                   | 2809                  | 375                   | Filing a submission after final rejection (37 CFR § 1.129(a))              |          |
| 1810                  | 750                   | 2810                  | 375                   | For each additional invention to be examined (37 CFR § 1.129(b))           |          |
| 1801                  | 750                   | 2801                  | 375                   | Request for Continued Examination (RCE)                                    |          |
| 1802                  | 900                   | 1802                  | 900                   | Request for expedited examination of a design application                  |          |

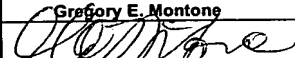
Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)**0.00**

## SUBMITTED BY

## Complete (if applicable)

|                   |                                                                                     |                                   |                    |           |              |
|-------------------|-------------------------------------------------------------------------------------|-----------------------------------|--------------------|-----------|--------------|
| Name (Print/Type) | Gregory E. Montone                                                                  | Registration No. (Attorney/Agent) | 28,141             | Telephone | 703-312-6600 |
| Signature         |  | Date                              | September 22, 2003 |           |              |

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: K. YAMADA, et al.  
Application No.: Rule 1.53(b) Continuation of U.S. Patent Application  
Serial No. 10/101,463, filed March 20, 2002  
Filed: On even date herewith  
For: IMPROVED CIRCUIT BOARD  
Art Group of Parent: 2827  
Examiner of Parent: L. C. Cruz

**REQUEST FOR INTERVIEW PRIOR TO FIRST OFFICE ACTION**  
**IN ACCORDANCE WITH MPEP § 713.02**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

September 22, 2003

Sir:

In accordance with the provisions of MPEP § 713.02, which states:

"A request for interview prior to first Office Action is ordinarily granted in continuing or substitute applications,"

applicants respectfully request that the Examiner contact the undersigned attorney to arrange for an interview prior to first Office Action in this continuation application. With regard to this, applicants are in the process of preparing new claims for the Examiner's consideration, which will be discussed during the interview. Applicants and the undersigned attorney greatly appreciate the Examiner's consideration in this regard.


If the Examiner believes that there are any other points which may be clarified or otherwise disposed of, either by telephone discussion or by personal interview,

the Examiner is invited to contact applicants' undersigned attorney at the number indicated below.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, Deposit Account No. 01-2135 (503.34065CV4).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

By   
Gregory E. Montone  
Reg. No. 28,141

GEM/dlt

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